

# **STORMWATER POLLUTION PREVENTION PLAN**

**FOR THE**

**BRC EASTSIDE COMMON AREAS SOIL REMEDIATION PROJECT  
HENDERSON, NEVADA**

**PREPARED FOR:**

**BASIC REMEDIATION COMPANY  
875 WEST WARM SPRINGS ROAD  
HENDERSON, NEVADA 89011**

**PREPARED BY:**

**ENTACT SERVICES LLC  
3129 BASS PRO DRIVE  
GRAPEVINE, TEXAS**

**REV 1 – July 21, 2008**

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## OWNER/OPERATOR CERTIFICATION STATEMENT

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

### Initial Certification:

_____	_____
Print Name	Title
_____	_____
Signature	Date

### Annual Re-Certification:

_____	_____
Print Name	Title
_____	_____
Signature	Date

### Annual Re-Certification:

_____	_____
Print Name	Title
_____	_____
Signature	Date



## CONTRACTOR'S CERTIFICATION STATEMENT

I certify under penalty of law that I understand the terms and conditions of the State's General Permit (NVR100000) that authorizes stormwater discharges associated with industrial activity from the construction site identified as part of this certification.

<b>Company 1</b>		Address
City	State	Phone No.
Print Name		Title
Signature		Date
<b>Company 2</b>		Address
City	State	Phone No.
Print Name		Title
Signature		Date
<b>Company 3</b>		Address
City	State	Phone No.
Print Name		Title
Signature		Date
<b>Company 4</b>		Address
City	State	Phone No.
Print Name		Title
Signature		Date

## 1.0 INTRODUCTION

This Stormwater Pollution Prevention Plan (SWPPP) has been developed for the BRC Eastside Common Areas Soil Remediation Project Site (site) located in Henderson, Clark County, Nevada. This SWPPP has been prepared in accordance with the requirements of the State of Nevada Division of Environmental Protection's *Stormwater General Permit NVR100000* dated September 14, 2007. A copy of the permit is included in Appendix A.

The purpose of the SWPPP is to identify the potential sources of pollution that may reasonably be expected to affect the quality of stormwater discharges from the site in relation to activities described in this Plan. The SWPPP describes the implementation practices that will be used to reduce the pollutants in stormwater discharges associated with construction activities related to excavation, placement, backfilling, and grading and assure compliance with the terms and conditions of the Stormwater General Permit.NVR100000.

### 1.1 Site Location and Description

The project is located at the former BMI Industrial Complex in Henderson, Nevada. The scope of work generally involves the phased construction of an on-site CAMU, concurrent placement of approximately two million cubic yards of designated on-site soils and waste materials within the CAMU, installation of a final cover system over the CAMU, associated storm water management features, and all of the various supporting scope components as designed.

The project Site represents a portion of what is known as the BMI Common Areas. This site is located near the intersection of Boulder Highway and West Warm Springs Road in Henderson, Nevada approximately 13 miles southeast of Las Vegas and 2 miles northeast of the City of Henderson's downtown. The general location and layout of the site are presented as Figures 1 and 2.

The entire project site encompasses a total of approximately 2,332 acres, of which 615 acres will only be accessed during remedial construction activities. For closure strategy discussion purposes, the site has been broken down into the following two main areas of work:

- The Eastside Common Area
  - 2,200 total acres, of which approximately 483 acres will be accessed for remedial construction activities
- Corrective Action Management Unit (CAMU) Area
  - 132 acres, where all 132 acres will be accessed for remedial construction activities

The Eastside Common Area is composed of unlined and lined wastewater effluent ponds, municipal wastewater infiltration basins, and virgin desert. Several designated ponds/basins covering approximately 240 acres will be remediated. This area contains approximately 2.0 million cubic yards of combined sediments and soils which will be relocated and consolidated within the newly constructed CAMU. There

are seventy one (71) ponds comprising the Eastside Soils Area, plus the Beta Ditch. Of these seventy (71) ponds, fifty-five (55) are considered dry and sixteen (16) are considered wet.

The CAMU area is composed of the closed BMI North and South landfills, a series of trenches into which various wastes were deposited, and vacant land. The CAMU area is where a containment structure will be constructed for the waste material excavated from the Eastside Common Area ponds.

The remedial activities addressed in this SWPPP are being conducted to comply with the requirements of the Record of Decision (ROD) - Remediation of Soils and Sediments in the Upper and Lower Ponds at the BMI Complex dated November 2001 and the Settlement Agreement and Administrative Order on Consent: BMI Common Areas Phase 3 dated 2006, both issued by the Nevada Division of Environmental Protection. The *Corrective Action Plan* dated September 2006, the *Permit for Hazardous Remediation Waste Management Activity* dated September 24, 2007 and the *BRC Closure Plan* dated November 2007 are referenced in the ROD and provide specific details regarding the remediation process at the site.

## **1.2 Project Specific Information**

Name and Location of Project	BRC Eastside Common Areas Soil Remediation Project 875 W. Warm Springs Road Henderson, Clark County, Nevada 89011
Operator Name, Address and Phone No.	ENTACT Services LLC 699 S. Friendswood Drive, Suite 100 Friendswood, Texas 77546 (281) 996-9892
Person Responsible for Implementing the SWPPP	Mike Carlson ENTACT Field Engineer 110 E. Warm Springs Road Henderson, Nevada 89011 (630) 330-8237
Notice of Intent Filing Date	5/14/08

## **2.0 PROJECT DESCRIPTION**

The construction activities described in this SWPPP will be conducted within an approximate 615 acre portion of the 2,332 acre site. The remedial activities presented in this plan are further described in the *Corrective Action Plan* dated September 2006, the *Permit for Hazardous Remediation Waste Management Activity* dated September 24, 2007 and the *BRC Closure Plan* dated November 2007.

### **2.1 Nature of Proposed Construction Activity**

The scope of work for the remedial action at the site focuses on the following: 1) excavation of impacted soils and associated material containing chemical concentrations in excess of the site-specific cleanup goals, as defined in the *BRC Closure Plan*; 2) transportation of the impacted soils and associated material for permanent disposal at a CAMU located on and adjacent to the former BMI landfill; and 3) interment and containment of the impacted soils and associated material within the CAMU.

### **2.2 Intended Sequence of Major Soil Disturbing Activities**

The remedial activities associated with the site will address impacted soils present in the Eastside Common Area with concentrations that exceed the site-specific cleanup goals. The preliminary sequence of major activities is expected to be as follows:

- Mobilize personnel and equipment to the site.
- Set-up site support facilities, including project trailers, parking areas and temporary security fencing.
- Install erosion and sedimentation control measures.
- Begin soil conditioning and blending of impacted soils at the Eastside Common Areas for dewatering purposes.
- Construct the required access roads and haul roads across the site.
- Establish the decontamination areas and the vacuum station.
- Construct the northwest detention basin, northeast detention basin and western perimeter stormwater channel excavation and install the associated stormwater piping and manholes.
- Grade and prepare the BMI Landfill south surface and north surface.
- Install the BMI Landfill south liner and cover soil.
- Install the BMI Landfill north liner and cover soil.
- Clear and grub brush and vegetation located in the proposed CAMU area.

- Begin construction of the CAMU. Construction will occur in 6 phases: I, II, IIIA, IIIB, IV, and V and each phase includes excavation, grading and subgrade preparation; liner installation; operational layer installation; waste placement; and interim cover placement.
- Excavate the Western Ditch for use as the operational layer in Phase I CAMU construction.
- Excavate and backfill the slit trenches concurrent with the Phase II CAMU construction.
- Excavate the sewer line alignment within the Beta Ditch concurrent with the excavation of the slit trenches.
- Excavate parcel 7A, the remainder of the Beta Ditch and the remainder of the Eastside Common Area moving from east to west.
- Haul materials from the Eastside Common Area to the CAMU concurrent with excavation of the slit trenches and the Eastside Common Area.
- Conduct the performance criteria testing at the Eastside Common Area.
- Install the final closure liner on all phases of the CAMU.
- Install the CAMU cover on all phases of the CAMU. The cover installation includes placement of the CPE pipe, cover soil, grouted riprap, aggregate base road, soil binder on areas with <5H:1V grades, and gravel mulch on sideslopes with >H5:1V grades.
- Remove the support facilities and demobilize from the site.

The remedial activities described above will be scheduled as depicted on the project schedule included as Figure 3. The exact sequence of events, i.e., the order in which the activities are addressed, may be dependent on several factors including site conditions, work procedures, health and safety protocols, oversight decisions, and weather.

## **2.3 Site Area**

Remedial construction activities are expected to be performed within 615-acres of the 2,332 acre site. Approximately 483 acres will be accessed in the Eastside Area (of that, 240 acres will be remediated). Approximately, 132 will be accessed within the CAMU area to construct the CAMU. Refer to Figure 2 for a depiction of those areas.

## **2.4 Run-off Coefficients**

The run-off coefficient for the site prior to the remedial action is estimated to be 0.25 at the Eastside Common Areas and CAMU area based on an undeveloped desert land use. The average pre-project runoff coefficient is 0.25.

Pre-Project Land Use 1 = 1130 acres x 0.25 = 282.50 / 1130 acres = 0.25

The run-off coefficient for the site after the completion of the remedial action is estimated to be 0.25 at the Eastside Common Areas and 0.76 at the CAMU area. The run-off coefficient for the Eastside Common Areas is based on undeveloped desert land use and the run-off coefficient for the CAMU area is based on desert industrial use, i.e. a lined landfill. (Two stormwater detention basins have been incorporated into the design of the CAMU to serve as the main hydrologic engineering control to reduce stormwater discharge from the CAMU area to at or below the pre-remediation discharge flow rates. Thus, the actual run-off coefficient from the CAMU area will be less than indicated.) The average post-project runoff coefficient is 0.31.

Post-Project Land Use 1 = 1000 acres x 0.25 = 250

Post-Project Land Use 2 = 130 acres x 0.76 = 98.80

Average Post-Project Runoff Coefficient =  $(250+98.80) / 1130 = 0.31$

The run-off coefficients were obtained from Section 600 of the Clark County Regional Flood Control District's *Hydrological Criteria and Drainage Design Manual* dated August 1999.

## **2.5 Name of Receiving Water**

Regional surface water drainage is generally to the east. Surface water flow occurs for brief periods of time during periodic precipitation events and eventually drains to the Las Vegas Wash, which is to the north of the site's northern border. Four jurisdictional wetlands are present in the northern portion of the site that contain water during portions of the year. These 4 wetlands are near larger wetlands associated with the Las Vegas Wash and occupy approximately 13 acres. Both the Las Vegas Wash and jurisdictional wetlands are located to the north of the limits of the remedial work. The site, however, is located within the 100-year floodplain of the Las Vegas Wash.

Stormwater within the remedial work zone will be contained and managed within this zone and will not be discharged to these receiving waters.

## **2.6 Soil Types**

According to the USDA NRCS Soil Survey for the Las Vegas Valley Area, Nevada, Part of Clark County, the soil types present at the Eastside Common Areas consist of the Arizo very gravelly fine sandy loam 2 to 8 percent slopes, the Caliza-Pittman-Arizo complex 0 to 8 percent slopes, the Caliza very gravelly sandy loam 2 to 8 percent slopes, and Slickens. The soil types present at the CAMU consist of the Caliza extremely cobbly fine sandy loam 2 to 8 percent slopes and Urban Land. All of these soils are well drained with a low water holding capacity.

Based on soil samples collected from the site during previous investigations, the soils are primarily sand and gravel with occasional cobbles consistent with the depositional environment of an alluvial fan. The site is located on alluvial fan sediments with a surface that slopes to the north-northeast at a gradient of approximately 0.02 feet per foot towards the Las Vegas Wash. Alluvial soils were deposited from the McCullough and River Mountain ranges located to the southwest and southeast of the site.

Soils/sediments associated with the site have been found to be impacted with metals, semi-volatile organic compounds, volatile organic compounds, polychlorinated biphenyls, pesticides, dioxins and furans, perchlorate, radionuclides, and asbestos. The contaminants of concern listed are typically entrained with soils particles. The purpose of the remedial activities addressed in this SWPPP is to address these contaminants in soils at the site.

### 3.0 PRACTICES AND MEASURES

Best management practices will be implemented during the remedial activities to ensure the prevention and/or minimization of accelerated erosion and sedimentation and the control, minimization and/or prevention of releases of impacted soils entrained with stormwater discharges at and from the site. All erosion and sediment controls will be constructed according to the *Nevada Best Management Practices Handbook* published by the State Conservation Commission in 1994. The following subsections describe the best management practices (BMP) that will be implemented during the remedial activities.

A series of berms currently located at the Eastside Common Area will be incorporated into the site BMPs. These berms will also be used to control and manage any stormwater that is not able to infiltrate site soils.

#### 3.1 Best Management Practices

Best management practices will be employed during all major soil disturbing activities at the site, as described in Section 2.2. The following table presents the BMPs required for each major soil disturbing activity, as applicable.

Remedial Activity	BMPs	Implementing Contractor
Mobilize personnel and equipment	Not applicable	ENTACT Services LLC
Setup support facilities	Construction entrance, good housekeeping	ENTACT Services LLC
Install erosion and sediment control measures	Not applicable	ENTACT Services LLC
Condition and blend impacted soils at Eastside Common Area	Maintain track out pad at construction entrances, existing and planned berms,	ENTACT Services LLC
Construct access roads and haul roads	Existing and planned berms	ENTACT Services LLC
Establish decontamination area and vacuum station	Existing and planned berms	ENTACT Services LLC
Grade and prepare BMI Landfill North and South surfaces	Slope shaping (Grading)	ENTACT Services LLC
Install liner and cover soil at BMI Landfill North and South	Liner (none) Soil – Soil binder, rock on slopes	ENTACT Services LLC
Construct northwest detention basin and northeast detention basin, excavate western perimeter stormwater channel and install associated stormwater piping and manholes	Slope shaping (grade towards center), existing features (berms, adjacent landfills up-gradient)	ENTACT Services LLC
Clear and grub in CAMU area	existing features (berms, adjacent landfills up-gradient)	ENTACT Services LLC



<b>Remedial Activity</b>	<b>BMPs</b>	<b>Implementing Contractor</b>
Construct CAMU in 6 phases	Slope shaping, drainage channels, detention basins	ENTACT Services LLC
Excavate Western Ditch	Existing berms, phase I & II boundary berms/slopes	ENTACT Services LLC
Excavate and backfill slit trenches	Adjacent landfills up-gradient	ENTACT Services LLC
Excavate sewer alignment within Beta Ditch	Existing and planned berms	ENTACT Services LLC
Excavate Parcel 7A, the remainder of Beta Ditch and remainder of Eastside Common Area	Existing and planned berms	ENTACT Services LLC
Haul excavated materials to CAMU	Decontamination Pads, Trackout Pads, Existing and planned berms as needed along the haul road. Removal of visual contamination on haul routes prior to anticipated rain events. Full time street sweeper during on-road hauling activities	ENTACT Services LLC
Conduct performance criteria testing at Eastside Common Area	Existing and planned berms	ENTACT Services LLC
Install final closure liner and cover on all phases of CAMU	Soil binder, gravel mulch, drainage channels, detention basins	ENTACT Services LLC
Concrete Truck Washout Activities	Planned berms to contain	ENTACT Services LLC
Demobilization	Not applicable	ENTACT Services LLC

These BMPs are further described in the following subsections.

### **3.2 Stabilization Practices**

Stabilization measures are designed to reduce the erosion potential of the placed soils by shielding the soil surface from direct erosive impacts, by slowing the rate of water run-off and by physically holding the soil in place using vegetation. Stabilization practices will be implemented in disturbed areas as soon as practicable after the completion of excavation, backfilling and grading activities have ceased. Care will also be taken during the remedial activities to minimize the areal extent of the disturbed areas and protect existing vegetation to the extent possible.

#### **3.2.1 Temporary Practices**

Temporary stabilization practices will be implemented on soil stockpiles and disturbed portions of the site where construction activity is expected to cease for 14 days or more and will not be resumed within 21 days. The following temporary stabilization practices will be used at the site:

- **Dust Control** - Dust control will be conducted in disturbed areas and on haul roads to prevent or reduce the movement of wind-borne dust particles. Disturbed areas where excavation activities are determined to be complete will be watered to form a crust immediately following disturbance or magnesium chloride will be applied.

### **3.2.2 Permanent Practices**

Permanent stabilization practices will be implemented on disturbed portions of the site where construction activities have permanently ceased. These practices will be applied no later than 14 days from the date of the last construction activity in that area. The following permanent stabilization practices will be used at the site:

- **Slope Shaping** - The construction of the CAMU, including subgrade preparation, waste placement and grading of wastes and cover materials, will be performed in accordance with the design documents. The design of the CAMU considered soil erosion and runoff potential for the finished product.
- **Gravel Mulch** - Gravel mulch will be placed on the CAMU side slopes with grades that exceed 5H:1V. An approximate 2-inch layer of  $\frac{3}{4}$  inch gravel will be used.
- **Soil Binder** - Soil binder will be placed on the CAMU top deck areas with grades less than 5H:1V.

Permanent stabilization, other than dust control and appropriate temporary stabilization measures, will not occur on the Eastside Common Areas as the disturbed land will be immediately turned over to the developer upon completion of the remedial activities. Any additional work performed in this area will be permitted separately by the developer.

### **3.2.3 Timing**

The stabilization practices will be coordinated with the initiation and completion of the excavation, backfilling and grading activities, as applicable. Stabilization measures will be initiated as soon as practicable where construction activities have temporarily or permanently ceased, but in no case more than 14 days after the construction activity in that portion of the site has temporarily or permanently ceased, except where:

- 1) The initiation of stabilization measures by the 14<sup>th</sup> day after construction activity temporarily or permanently ceases is precluded by snow cover or frozen ground conditions, stabilization measures will be initiated as soon as practicable.
- 2) The construction activity on a portion of the site temporarily ceased, and earth-disturbing activities will be resumed within 21 days, temporary stabilization measures do not have to be initiated on that portion of the site.
- 3) In arid areas, semiarid areas and areas experiencing droughts where the initiation of stabilization measures by the 14<sup>th</sup> day after construction has temporarily or permanently ceased is precluded by seasonal arid conditions, stabilization measures shall be initiated as soon as practicable.

When remediation at the Eastside Common Area is complete, the area will be turned over to the developer. At that time, discharges from the development or next phase of work will be permitted separately and the installation and maintenance of the erosion control measures left in place will become the responsibility of the new permittee.

### **3.2.4 Installation and Maintenance**

Stabilization practices will be installed in accordance with good engineering practice and the methods described in the *Nevada Best Management Practices Manual*. Additional stabilization practices listed in this manual may also be used at the site if needed.

The location of the stabilization measures will be based on visual observation and the extent of disturbance within the work areas of the site. The anticipated locations of these measures are depicted on Figure 4.

ENTACT will be responsible for the implementation and maintenance of these practices, as described in Section 4.0, as long as ENTACT maintains day-to-day operational control of the activities necessary to ensure compliance with this Plan. Upon permanent stabilization of the site, the NDEP Notice of Termination will be filed.

### **3.3 Structural Practices**

Structural practices are designed to prevent erosion and minimize sediment at the site to the extent practicable. Structural practices will be implemented in and around the construction areas to divert or filter flows from exposed soils, reduce flow velocities or temporarily store flows and limit runoff from the exposed areas of the site. The following structural practices will be used at the site during the implementation of the remedial activities:

- Existing and Planned Earthen Berms - Existing earthen berms present around the lined and unlined wastewater effluent ponds; at the north, east, and south perimeters of the remedial work zone at the Eastside Common Area. Additional earthen berms will be constructed along the north and south sides of the main CAMU haul route, around the 200,000 cy Stockpile Area, along the eastside of the BMI North Landfill, and the eastern edge of CAMU Phase IIIA. Earthen berms will also be constructed along the perimeters of primary remedial work zones at the Eastside Common Area (to connect the existing perimeter berms) to further contain stormwaters within this zone. These berms will remain in place during the implementation and after the completion of the remedial activities.
- Straw Bale Sediment Barriers - Straw bale sediment barriers may be used across swales and in ditches and drainage areas to retain sediments by retarding flow and intercepting and filtering stormwater runoff.
- Permanent Sediment Basins - Two permanent detention basins will be installed prior to the construction of the CAMU. These basins will be used to collect stormwater run-off during the placement and grading activities associated with the construction of the CAMU, as well as run-off

waters after the completion of construction activities. The detention basins will allow for the settling of any sediment entrained in the stormwater run-off prior to discharge or evaporation.

- **Drainage Channels** - A drainage channel will be constructed near the support zone to convey off-site stormwaters from Pabco Road, which have historically impacted the site, to the Alpha Ditch, which transfers waters to the wastewater treatment plant for treatment and discharge. Drainage channels will also be installed on the west, south and east sides of the CAMU prior to construction of the CAMU to convey stormwater runoff from the CAMU area to the detention basins.
- **Stabilized Construction Entrances/Exits** - Stabilized construction entrances/exits will be installed at each of the project sites to facilitate the removal of sediment/soil from construction equipment and transport vehicles prior to exiting the work area. Construction entrances/exits will be stabilized by installing a 3" rock which will act as a 'tire scrub' for vehicles and trucks exiting each of the project sites. This rock will extend for a minimum of 50' from the edge of the asphalt to the concrete decontamination pad.

### **3.3.1 Timing**

The installation of the structural measures will be coordinated with the initiation of the construction phase in the areas where remedial activities are scheduled and where material will be temporarily staged, if necessary. The sediment and erosion control measures may be adjusted as site conditions permit during the remedial activities. When the work areas are stabilized or work has been completed per the design, the erosion and sediment control measures will be removed from the site.

When remediation at the Eastside Common Area is complete, the area will be turned over to the developer. At that time, discharges from the development or next phase of work will be permitted separately and the installation and maintenance of the erosion control measures left in place will become the responsibility of the new permittee.

### **3.3.2 Installation and Maintenance**

The erosion and sediment control measures will be installed in accordance with the methods described in the *Nevada Best Management Practices Handbook*. Additional erosion and sediment control measures listed in this manual may also be used at the site if needed.

The location of the erosion and sediment control measures will be based on visual observation of surface water migration pathways at the site. The anticipated locations of these measures are depicted on Figure 4.

ENTACT will be responsible for the implementation of these controls as long as ENTACT maintains day-to-day operational control of the activities necessary to ensure compliance with this Plan.

### **3.3.3 Sediment Management**

Accumulations of sediment in the detention basins will be removed when the design capacity has been reduced by 50%. Accumulations of sediment entrained in the hay bale sediment barriers will be removed

as necessary to ensure proper operation. The removed sediments will be consolidated within the CAMU. Any off-site accumulations of sediment will be removed at a frequency sufficient to ensure no adverse effects on water quality (prior to the next rain event).

### **3.4 Stormwater Management**

BMPs will be implemented as part of the remedial activities to control pollutants in stormwater discharges. These controls will generally include those stabilization and structural measures presented in the previous subsections.

In general, stormwater run-off that has contacted impacted soils at the site will be allowed to infiltrate into the subsurface within the work zones. If the stormwater cannot infiltrate into the subsurface, then the stormwater will be collected and transferred to the existing bermed areas at the Eastside Common Area for temporary storage pending disposal or evaporation.

#### **3.4.1 Post-construction**

Post-construction stormwater management measures that will be installed during the construction process to control pollutants in stormwater discharges that will occur after construction operations have been completed include the northwest detention basin, northeast detention basin, associated storm drain pipes which tie into the storm drain manholes, and swales/channels in the CAMU that drain to the detention basins. There will not be any post-construction management measures at the Eastside Common Area due to the fact that the developer will assume control of the land immediately upon completion of the remedial activities.

### **3.5 Good Housekeeping Practices**

Good housekeeping practices will be implemented to minimize accidents and ensure a high quality of work. The following good housekeeping practices will be implemented during the remedial activities:

- Erosion and sediment control measures will be adequately positioned, properly constructed and maintained throughout the duration of the project.
- Clearing operations will be confined to the limits of excavation. Existing vegetation will be protected to the extent possible.
- All materials stored on-site will be stored in a neat, orderly manner in their appropriate containers.
- Erosion and sediment control measures will be effective in retaining sediments on-site.
- Controls will be installed such that sediment transported from the site onto city roads will be minimized.
- Stabilization practices will be effective in permanently stabilizing disturbed areas.
- Corrective measures will be implemented as soon as practicable after a deficiency is noted.

- Good housekeeping practices will be incorporated into discussions during the daily safety meetings.
- Trash and other waste debris will be picked up on a daily basis and placed in the appropriate containers for off-site disposal.

### **3.6 Other Practices**

#### **3.6.1 Material Staging and Waste Disposal**

All non-hazardous construction debris and general office trash will be disposed in a dumpster placed on-site. Trash receptacles will also be placed in the storage trailers for the collection of non-hazardous trash and debris. These waste materials will be disposed off-site at a Subtitle D disposal facility, such as the Republic Services, Inc. landfill located in Apex, Nevada. Spent personal protective equipment (PPE) generated during the remedial activities will be placed in designated site containers and disposed of properly. Hazardous wastes generated during the remedial activities which will require off-site disposal will be containerized as appropriate and transported to the U.S. Ecology facility in Beatty, Nevada for disposal. Portable restroom facilities will be located at the support facilities or decontamination zone for use by site personnel and will be serviced by a third party on a regular basis. Remediation wastes excavated from the Eastside Common Areas will be direct loaded for transport to the CAMU for disposal or temporarily staged in the material staging area located to the east of the support zone or in the bermed excavation areas to the east of the Beta Ditch.

Hydraulic oils, motor oils and lubricants will be stored in the on-site lubricant storage cabinet. Quantities of these items should not exceed 20 gallons. If larger quantities of these items are required to be on-hand, ENTACT will review the storage and containment of those items at such time. All appropriate health and safety requirements for storing this material on-site will be followed.

Diesel fuel will be stored at the project site in double-walled tanks. The tank on the Eastside will consist of a 12,000 gallon tank surrounded by adequate spill protection as required for fueling operations. The tank on the CAMU site will be a 450 gallon tank meeting the same requirements. All appropriate health and safety requirements for storing this material will be followed. Permits will also be obtained as required by governing law.

Construction materials expected to be stored on-site during the remedial activities will include aggregate, structural fill, liner, etc. These materials will be stored at the material staging area located to the east of the support zone or the at the existing stockpile area located to the north of the CAMU, as depicted on Figure 4. Stockpiles of granular materials will be covered, as needed, with polyethylene sheeting on a daily basis to prevent wind dispersion of the stockpiled materials when not in use.

#### **3.6.2 Spill Prevention and Response**

Pollution prevention measures will include implementation of BMPs. If a reportable quantity of oil or hazardous material release is discovered, ENTACT will notify the National Response Center at (800) 424-8802 immediately. The U.S. EPA will be notified verbally within 24 hours and in writing within 14 days. Complete emergency response and spill cleanup procedures are detailed in the *Site-specific Health*

*and Safety Plan*. The SWPPP will also be modified to include the date of the release, the circumstances leading to the release and the steps taken to prevent reoccurrence of the release. Because greater than 1,320 gallons of oil or oil products, i.e. diesel fuel, will be stored or used on-site during the remedial activities, a *Spill Prevention, Control and Countermeasures Plan* has been developed to further describe the spill prevention and response procedures for the site.

### **3.6.3 Off-site Vehicle Tracking**

Trucks used to transport excavated soils will be required to stay on established haul roads located outside of the exclusion zone. If trucks are required to enter the exclusion zone, dry decontamination procedures will be implemented in order to remove soil residuals from the truck tires and undercarriage members, i.e. truck tailgates and side boards will be swept clean using brooms and other hand tools. An inspection of the vehicle will be conducted to ensure that no contaminated material or soils will be tracked off-site. If necessary, steam cleaning procedures will be implemented to further reduce or eliminate off-site tracking of mud or dirt from the site if straight decontamination or dry decontamination is determined to be less effective for tracking site soils onto public roadways.

A construction entrance/exit will be constructed at the site exit to help reduce vehicle tracking of soils from the site onto public roads. The exit will be swept as needed to remove any excess mud, dirt or rock tracked from the site. Any incidental soil tracked from the load-out area will be immediately cleaned up. The construction exit will be constructed in accordance with the *Nevada Best Management Practices Manual*.

Vehicular traffic will be restricted to a speed limit of 15 mph on-site and vehicles will be required to stay on established site haul roads to the extent possible.

### **3.6.4 Other Pollutant Sources**

No other pollutant sources associated with the remedial activities are expected at the site.

### **3.6.5 Off-site discharges**

No off-site discharges from dedicated sites are expected other than those already discussed.

### **3.6.6 Non-stormwater discharges**

Non-stormwater discharges expected during the remedial activities may include the following:

- Discharges from fire-fighting activities;
- Fire hydrant flushing;
- Water used to wash vehicles where detergents are not used;
- Water used to control dust provided effluent or other wastewater are not used;



- Potable water sources including water line flushing;
- Routine external building wash down where detergents are not used;
- Pavement wash waters where spills or leaks of hazardous materials have not occurred;
- Uncontaminated air conditioning or compressor condensate;
- Uncontaminated groundwater or spring water;
- Foundation or footing drains where flows are not contaminated with process materials;
- Potable water well flushing where the receiving waters are ephemeral;
- Water used for compacting soil, provided effluent or other wastewaters are not used;
- Water used for drilling and coring where flows are not contaminated with additives;
- Water obtained from dewatering operations of foundations in preparation for and during excavation and construction.

These non-stormwaters will be routed through structural control measures to remove any sediments entrained in the water prior to discharge.

### **3.7 Potentially Contaminated Runoff Control**

Since the site has defined limits of contamination, both in the existing state and during the implementation of construction activities, it is imperative that these areas are separated from other potentially uncontaminated areas. This will be accomplished by protecting these uncontaminated areas from runoff water originating from contaminated areas by maintaining a physical barrier around active excavation areas to prevent possible cross contamination.

#### **3.7.1 Eastside Area**

The general order of excavation and sequence of construction on this side will play an important role in containing potentially contaminated runoff. Since excavation activities will generally progress from east to west and from up-gradient (south) to down-gradient (north), potentially clean areas and decontaminated areas will be less likely to receive contaminated water due to the areas general topography.

In order to protect uncontaminated areas from potentially contaminated runoff, temporary physical barriers (earthen berms) will be constructed (when not already existing) along the boundary between the uncontaminated and the contaminated areas. In many areas, these berms already exist; therefore the need to construct additional berms may be limited. Specifically, the wet ponds and many of the dry ponds have existing berms that completely surround the ponds. Once the contamination in one of these ponds has been removed, the access into the pond will be physically blocked with an earthen berm which will prevent any potential contamination from other areas from entering. In other dry pond areas, earthen berms will need to be constructed as the work progresses to keep potential contamination from entering clean areas.



### **3.7.2 CAMU Area**

During waste placement into the CAMU, stormwater coming in contact with contaminated materials will be contained within the cell. This will be accomplished differently depending on the specific phase of the CAMU affected and the elevation of the top of the waste at the time of the storm event. For all phases that contain waste below the top of the surrounding ground surface, the natural topography of the upper edge will keep the stormwater contained within the contaminated area. As the elevation of the waste rises above the existing ground surface, two main construction techniques will be performed to ensure stormwater that comes in contact with the waste does not migrate. The first will be the installation of interim cover while the waste is placed. The interim cover will consist of one foot of clean soil that will be placed on the side slopes of the final waste layer to prevent stormwater from coming in contact with impacted areas. Secondly, the grade of the top layer of the waste will be sloped inward toward the center of the specific CAMU phase to prevent rainwater that contacts the top surface of the working face from contacting clean, unlined areas of the CAMU. Additional temporary berms or channels will be constructed in the top waste surface as necessary to provide additional measures to prevent impacted stormwater from migrating into clean areas.

### **3.8 Applicable Federal, State and Local Programs**

Because the site is located within the 100-year floodplain of the Las Vegas Wash, the Clark County Regional Flood Control District will be notified of the remedial activities and the location of the proposed structural control measures.

## 4.0 INSPECTION AND MAINTENANCE PROCEDURES

Inspection and maintenance of the control measures have been identified as a major part of effective erosion and sediment control programs. Qualified personnel that are knowledgeable in the principles and practice of erosion and sediment controls and who possess the skills to assess conditions at the site that could impact stormwater quality and the effectiveness of the BMPs selected to control the quality of the stormwater discharges, i.e. the ENTACT Project Manager or his designee, will conduct the site inspections and ensure that the BMPs are maintained as appropriate during the construction period.

### 4.1 *Inspection*

Routine inspections will be conducted at the site to ensure that the BMPs are functional and the SWPPP is being properly implemented. Inspections will be performed at least once every 7 calendar days and within 24 hours of the end of a storm that is 0.5 inches or greater. The inspections will consist of a walk-through of all areas of the site disturbed by construction activity and areas used for the storage of materials that are exposed to precipitation. Specifically, observations will be made of those disturbed areas that have not undergone final stabilization, areas used for the storage of materials that are exposed to precipitation that have not undergone final stabilization, and structural control measures. Erosion and sediment control measures will be inspected to ensure they are functioning properly and that they are positioned adequately for the control of run-off and sediment. Stormwater inlets will be inspected for evidence of sediment accumulation or flow restriction. Locations where vehicles enter or exit the site will be inspected for evidence of off-site sediment tracking. Discharge locations, where accessible, will be inspected for evidence of, or the potential for, pollutants entering the drainage system and the receiving water(s). Areas where petroleum products are stored, used or handled will be inspected for spills or leaks from vehicles and equipment. The inspections will be documented as described in Section 5.0.

Weather observations, including the total amount of rainfall per 24-hour period, will also be measured and recorded on a daily basis. The following sources may be used to obtain weather forecasts and observations for the Henderson, NV area:

- The National Weather Service at [www.wrh.noaa.gov](http://www.wrh.noaa.gov)
- The Weather Channel at [www.weather.com](http://www.weather.com)

### 4.2 *Maintenance*

Based on the results of the inspections, the BMPs will be maintained, repaired or replaced. If the site inspections reveal that the BMPs are not operating effectively or if the effective capacity has been reduced by 50%, then maintenance will be performed before the next anticipated storm event or as soon as possible if maintenance before the next anticipated storm event is not practicable. The actions taken to correct the noted deficiencies will be documented as described in Section 5.0.

## **5.0 REPORTING AND RECORD-KEEPING REQUIREMENTS**

### **5.1 Construction Activities Log**

Records associated with the construction activities that will be maintained with the SWPPP include the following:

- Dates when major grading activities occur;
- Dates when construction activities temporarily or permanently cease on a portion of the site; and
- Dates when stabilization measures are initiated.

This information will be recorded on the construction activity log included in Appendix B.

### **5.2 Inspection and Maintenance**

Inspections will be performed by “Qualified personnel” which means a person knowledgeable in the principles and practice of erosion and sediment controls and who possesses the skills to assess conditions at the site that could impact stormwater quality and the effectiveness of the BMPs selected to control the quality of the stormwater discharges. Inspection results will be documented on an inspection report form and will include the following information, at a minimum:

- Name and qualification of the person conducting the inspection;
- Date the inspection was conducted;
- Findings of the inspection, including locations of discharges of sediment or other pollutants from the site, locations of BMPs that need to be maintained, locations of BMPs that failed to operate as designed or proved inadequate for a particular location, and locations where additional BMPs are needed that did not exist at the time of the inspection;
- Corrective actions taken to correct deficiencies; and
- Date the corrective action was implemented.

Incidents of non-compliance with the permit will also be documented on the inspection forms and maintained with the SWPPP for the duration of the construction activities. The documentation will include specific information on the cause of the non-compliance and actions that were taken to prevent any further causes of non-compliance. For those reports where incidents of non-compliance were not identified, the report will contain a certification that the facility is in compliance with the SWPPP and the Stormwater General Permit and will be signed by the ENTACT Project Manager.

The inspection forms will be retained as part of the SWPPP for a period of at least 3 years from the date that permit coverage expires or the site is finally stabilized. Example inspection forms are included in Appendix B to this SWPPP.

### **5.3 Updates to the SWPPP**

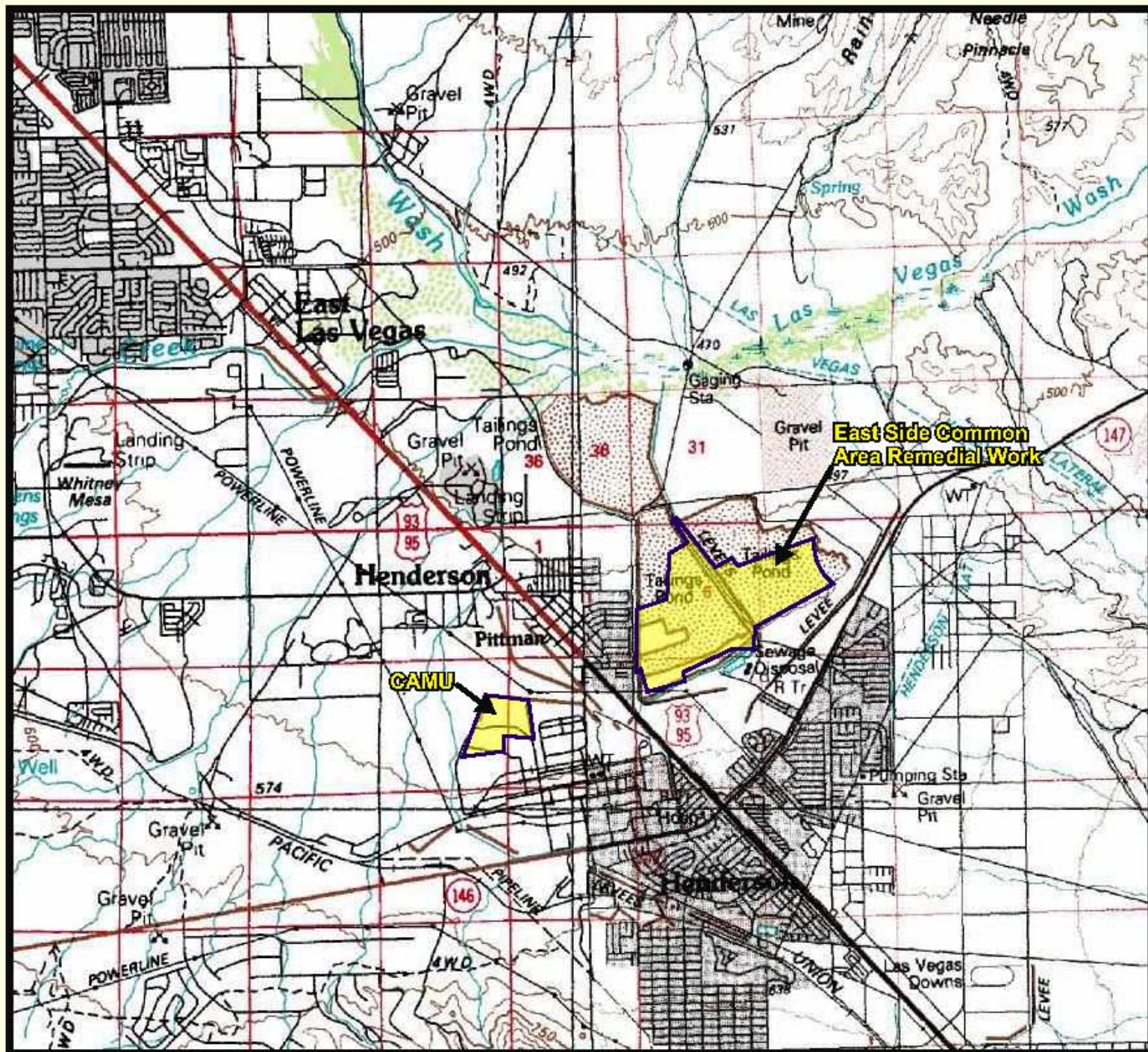
This SWPPP has been prepared and will be maintained and updated to be consistent with all federal, state and local guidelines for all applicable stormwater, sediment and erosion site plans or permits. Any updates or revisions required to the SWPPP will be made and fully implemented within 7 business days of the date a deficiency is identified during a site inspection. Updates or revisions to the SWPPP will also be required when:

- A change in the design, construction, operation, or maintenance at the construction site that has a significant effect on the discharge of pollutants to waterways of the U.S. that has not been previously addressed in the SWPPP;
- During inspections, monitoring, if required, or investigation by the operator or local, state or federal officials, it is determined the discharges are causing or contributing to water quality exceedances or the SWPPP is ineffective in eliminating or significantly minimizing pollutants in stormwater discharges from the construction site; or
- If implementation of the BMPs required by the SWPPP revision before the next storm event is impracticable, the BMPs will be implemented as soon as possible if implementation of the BMP before the next anticipated storm event is not practicable.

The updates or revisions to the SWPPP will be documented on the SWPPP update form included in Appendix B. These forms will be maintained with the SWPPP for the duration of the construction activities.

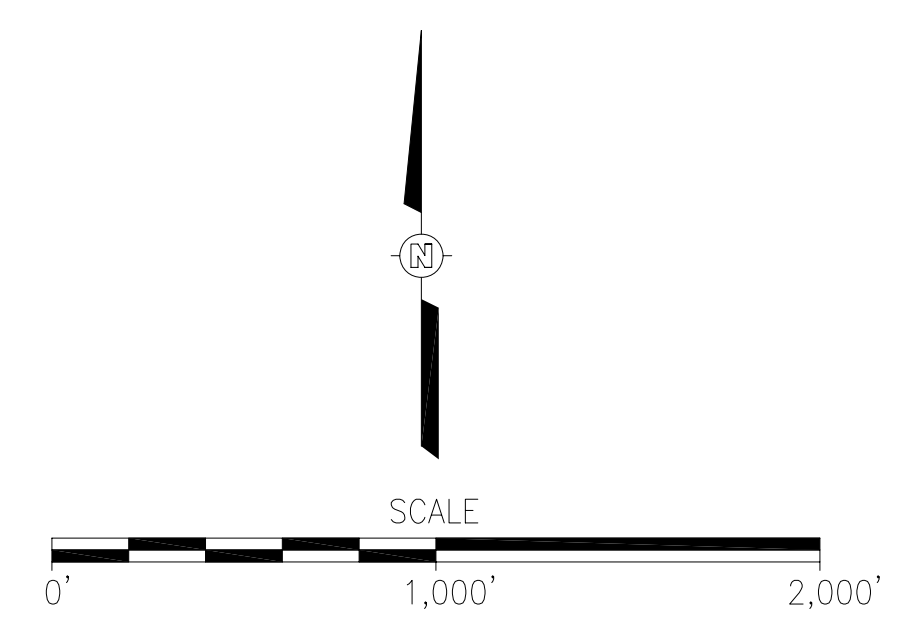
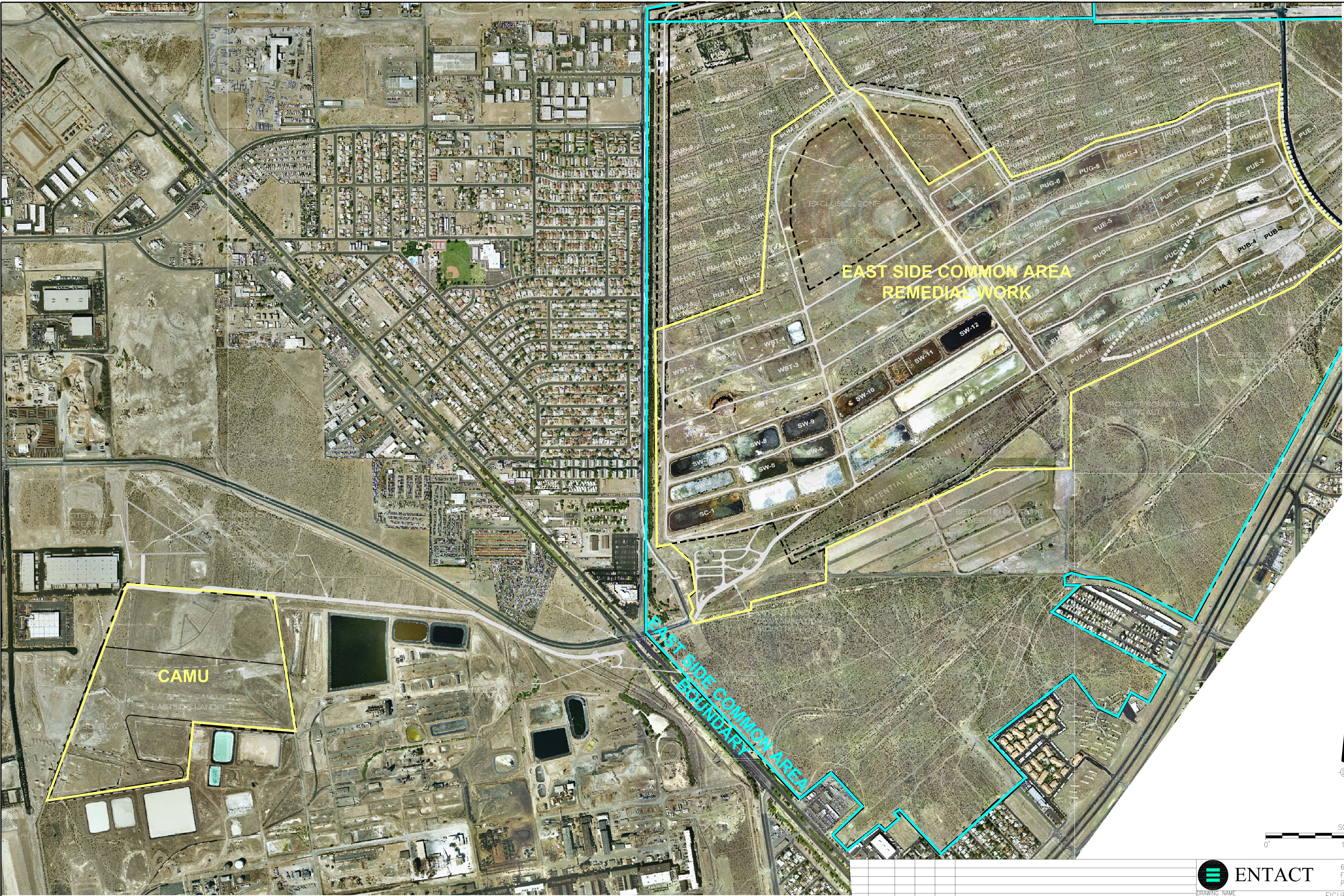
## **FIGURES**






### Quadrangle Location





					 <b>ENTACT</b>		699 South Friendswood Dr., Suite 101 Friendswood, Texas 77546 P: 281-996-9892		
					DRAWING NAME		FIGURE 2		
							SITE LAYOUT MAP		
					PROJECT NAME & LOCATION		BMI HENDERSON REDEVELOPMENT PROJECT HENDERSON, NEVADA		
PREPARED BY		M. CARLSON		CHECKED BY		E. GEHRINGER		REVISION	
DRAWN BY		M. CARLSON		APPROVED BY		G. TUNSTALL		0	
DATE		4-1-08		DATE		4-1-08		SHEET NO.	
PROJECT NO.		E7207		DRAWING NO.		E-7207-002		1 OF 1	
0	4/1/08	MMC	EG	GT	ISSUED FOR REVIEW				
REV	DATE	BY	CHK'D	APR'VD	DESCRIPTION				

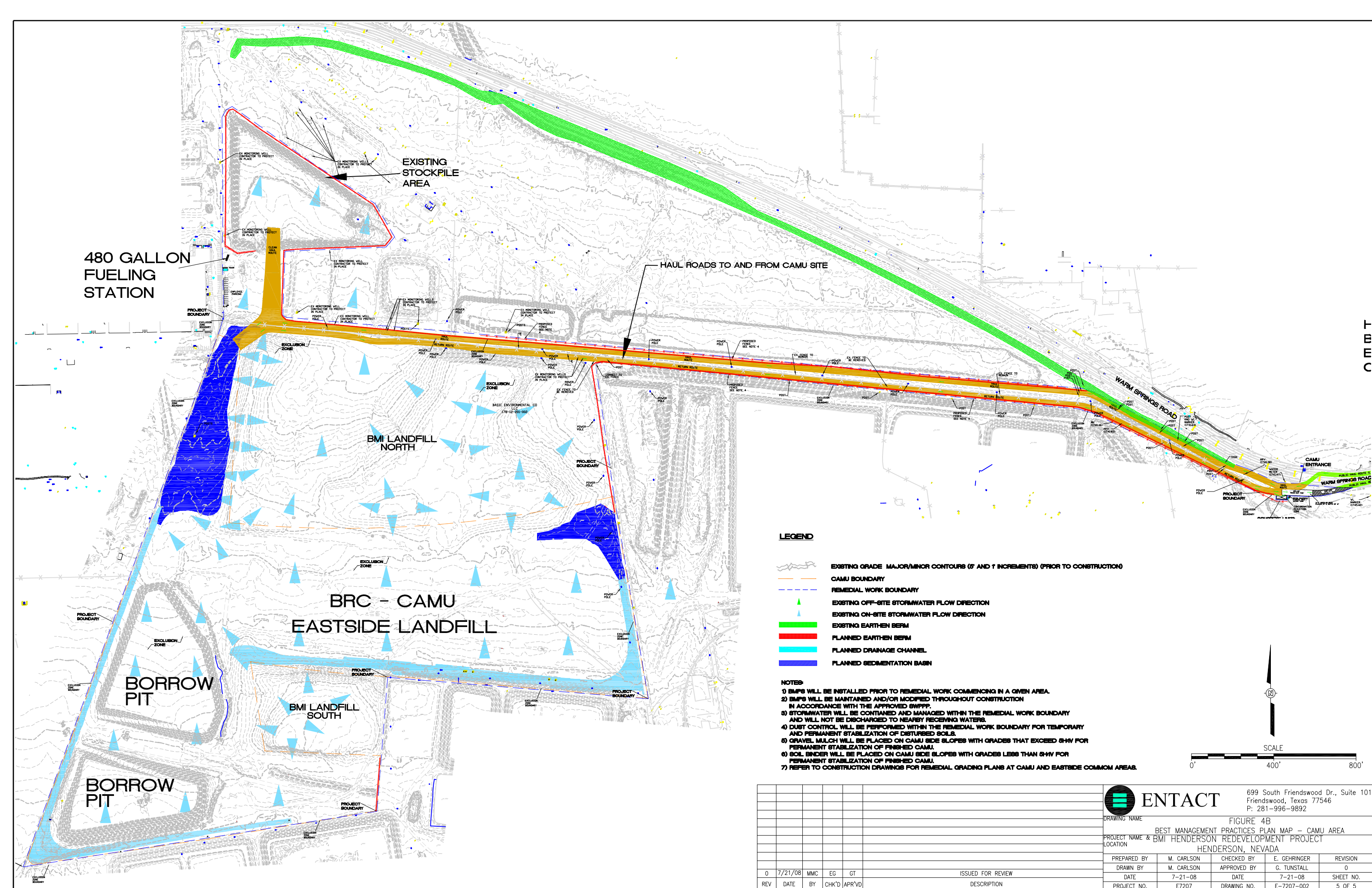




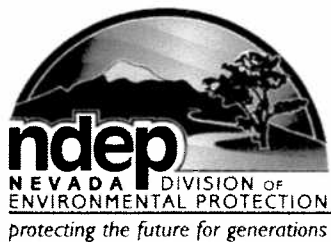








**APPENDIX A**  
**State of Nevada Division of Environmental Protection**  
**Stormwater General Permit NVR100000**



# STATE OF NEVADA

Department of Conservation & Natural Resources

*Jim Gibbons, Governor*

*Allen Biaggi, Director*

DIVISION OF ENVIRONMENTAL PROTECTION

*Leo M. Drozdoff, P.E., Administrator*

## Stormwater General Permit NVR100000

In compliance with the provisions of the Federal Clean Water Act as amended (33 U.S.C. 1251 et seq; the "Act") and Chapter 445A of the Nevada Revised Statutes (NRS), eligible dischargers who have submitted a Notice of Intent, filing fee, and have a Stormwater Pollution Prevention Plan(s) completed and maintained on the permittee's site location in accordance with this permit, are authorized to discharge

Stormwater Associated with Large Construction Activity

or

Stormwater Associated with Small Construction Activity

and

Stormwater Associated with Industrial Activity from Temporary Concrete, Asphalt, and Material Plants or Operations Dedicated to the Permitted Construction Project

to Waters of the United States in accordance with the conditions set forth in Parts I - V hereof.

This permit shall become effective on September 16, 2007.

This permit and the authorization to discharge shall expire at midnight September 15, 2012.

Signed this 14th day of September, 2007.

Steve McGoff, P.E.  
Bureau of Water Pollution Control

## **PART I. COVERAGE UNDER THIS GENERAL PERMIT**

- A. **Permit Area.** This General Permit covers the State of Nevada, except for Tribal Areas.<sup>1</sup>
- B. **Objective.** The objective of this permit is to control and reduce pollution of Waters of the U.S. (“WOUS”) from: Stormwater Discharges Associated with Large Construction Activity; Stormwater Discharges Associated with Small Construction Activity; and Stormwater Discharges Associated with Industrial Activity from temporary plants or operations set up to produce concrete, asphalt, or other materials for the permitted construction project; through the use of Best Management Practices (“BMPs”), as defined in Appendix A. In addition, BMPs shall include erosion and sediment controls, stormwater conveyance, stormwater diversion, and treatment structures, and any procedure or facility used to minimize the exposure of pollutants to stormwater or to remove pollutants from stormwater. Discharges to storm drain systems that in turn discharge to WOUS are considered to be discharges to WOUS.
- C. **Eligibility.** This General Permit authorizes discharges from stormwater discharge associated with large construction activity as defined in Appendix A, small construction activity as defined in Appendix A and industrial activities as defined in Appendix A provided the operator complies with all the requirements of this general permit and submits a Notice of Intent (“NOI”) in accordance with Part II of this general permit.

Any discharges that do not comply with the eligibility conditions of this permit are not authorized by the permit. A person must either apply for a separate National Pollutant Discharge Elimination System (“NPDES”) permit to cover the ineligible discharge(s), cease the discharge(s), or take the necessary steps to make the discharge(s) eligible for coverage under this permit.

### **D. Authorized Discharges**

1. Allowable Stormwater Discharges. Subject to compliance with the terms and conditions of this permit, an operator may discharge pollutants in:
  - a. Discharges of stormwater runoff associated with construction activities as defined in Appendix A;
  - b. Discharges that are designated by NDEP as requiring a stormwater permit under 40 CFR 122.26(a)(1)(v); 40 CFR 122.26(b)(15)(ii); or under 40 CFR 122.26(a)(9);

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<sup>1</sup> The State of Nevada, Division of Environmental Protection, Bureau of Water Pollution Control does not have permit authority for Tribal Lands. Construction discharge permits for Tribal Lands within the state must be acquired through EPA Region IX.



- c. Discharges from support activities(e.g. concrete or asphalt batch plants, equipment staging yards, material storage yards, excavated material disposal areas, borrow areas) provided:
    - i. The support activity is directly related to a construction site that is required to have NPDES permit coverage for discharges of stormwater associated with construction activity;
    - ii. The support activity is not a commercial operation serving multiple unrelated construction projects by different operators and does not operate beyond the completion of the construction activity at the last construction project it supports; and
    - iii. Appropriate controls and measures covering the discharges from the support activity areas are identified in a stormwater pollution prevention plan (“SWPPP”).
  - d. Non-stormwater discharges as noted in Part I.D.2 or as otherwise specifically allowed by the permit; and
  - e. Discharges comprised of a discharge listed in Part I (a) through (d) commingled with a discharge authorized by a different NDPEs permit and/or discharge that does not require NPDES permit authorization.
2. Miscellaneous Non-Stormwater Discharges. An operator may discharge the following non-stormwater discharges, provided they are not a significant source of pollutants and the operator implements appropriate BMPs to minimize pollutants discharged per Part III:
- a. Discharges from fire-fighting activities. Although fire-fighting drainage may contain significant pollutant concentrations, the frequency of discharge is low and the discharge is hereby authorized out of necessity;
  - b. Fire hydrant flushing;
  - c. Water used to wash vehicles where detergents are not used;
  - d. Water used to control dust, provided effluent or other wastewaters are not used;
  - e. Potable water sources including water line flushing;
  - f. Routine external building wash down where detergents are not used;
  - g. Pavement wash waters where spills or leaks of toxic or hazardous materials have not occurred (unless all spilled material has been removed) and where detergents are not used;
  - h. Uncontaminated air conditioning or compressor condensate;
  - i. Uncontaminated groundwater or spring water;
  - j. Foundation or footing drains where flows are not contaminated with process materials such as solvents;
  - k. Potable water well flushing where the receiving waters are ephemeral;
  - l. Water used for compacting soil, provided effluent or other wastewaters are not used;

- m. Water used for drilling and coring such as for evaluation of foundation materials, where flows are not contaminated with additives; and
- n. Water obtained from dewatering operations of foundations in preparation for and during excavation and construction that will have flows of 300 gallons per minute (“gpm”) or less for thirty (30) days or less.

#### **E. Limitations of Coverage**

1. Post Construction Discharges. This permit does not authorize stormwater discharges that originate from the site after construction activities have been completed and the site, including any temporary support activity site, has undergone final stabilization. Post-construction stormwater discharges from industrial sites may need to be covered by a separate NPDES permit.
2. Prohibition on Discharges Mixed With Non-Stormwater. This permit does not authorize discharges that are mixed with sources of non-stormwater, except as allowed in Part I.D.
3. Discharges Covered by Another NPDES Permit. This general permit does not authorize stormwater discharges associated with construction activities that have been covered under an individual permit or have been required to obtain coverage under an alternative general permit. Construction discharges at mining operations are covered under the Mining General Permit NVR300000.
4. Discharges Threatening Water Quality. This general permit does not authorize discharges that will cause or contribute to non-attainment of water quality standards or to the designated use of receiving waters. The operator must design and implement BMPs sufficient to meet this requirement.

#### **F. Waiver for Small Construction Activities.** NDEP may exempt a small construction operator from the requirement to obtain coverage under a stormwater permit, if certain criteria are met and proper application procedures followed.

1. Low Erosion Potential. If the small construction site is between 1 acre and 5 acres and the rainfall erosivity factor calculation (“R” in the Revised Universal Soil Loss Equation) is less than 5 during the **entire** period of construction activity, the site will be eligible for a waiver. The applicant must certify to NDEP that construction activity will occur only when R is less than 5. The erosivity factor can be calculated using NDEP’s NOI database.

The period of construction activity begins at initial earth disturbance and ends with the final site stabilization. The operator must submit a Permit Waiver electronically to NDEP in accordance with Part II of this permit before commencing construction activities in accordance with Part II.

Persons that are not required to file for permit coverage per this section must operate exempt construction sites in a manner that minimizes pollutants in the discharge. In the event discharges from the site may cause or contribute to non-

attainment of water quality standards, NDEP may require the operator to obtain permit coverage.

*Note: Construction activities that will disturb 5 acres or more cannot be exempted from stormwater permitting requirements. Also, construction activities less than 5 acres, but the parcel is part of a greater (5 acres or more) common plan of development or sale cannot be exempted.*

**G. Requirement for Individual Permit.** NDEP may require the holder of a general stormwater permit to apply for and obtain an individual permit in accordance with NAC 445A.269.

**H. Requirement for Stormwater Permit for Projects Less Than 1 Acre.** If NDEP determines that a project less than one (1) acre in size will impact receiving waters or its tributaries within a 1/4-mile radius of the project, the owner of the project will be required to obtain a stormwater permit and abide by the terms of this permit.

**I. Waiver for Certain Oil and Gas Operations.** NDEP may not require a permit for discharges of storm water runoff from construction operations at oil and gas exploration, production, processing or treatment operations or transmission facilities, composed entirely of flows which are from conveyances or systems of conveyances (including but not limited to pipes, conduits, ditches, and channels) used for collecting and conveying precipitation runoff and which are not contaminated by contact with or that has not come into contact with, any overburden, raw material, intermediate products, finished product, byproduct or waste products located on the site of such operations. A permit will be required if a stormwater discharge from a construction operation at an oil and/or gas exploration, production, processing, treatment, or transmission facility contributes to a violation of a water quality standard (except for discharges of sediment.)

## **PART II. REQUEST FOR INCLUSION UNDER THIS GENERAL PERMIT**

**A. Application for Coverage.** A person may be authorized to discharge under this general permit only if the stormwater discharge is associated with construction activities with the project site. An application seeking inclusion under this permit shall:

1. Submit a Notice of Intent ("NOI") no later than two (2) days prior to the start of construction. Eligible concrete, asphalt, and material plants or operations shall be included on the NOI submitted for the construction project. The site is covered provisionally under this permit once the NOI has been received electronically by NDEP and until approval of the permit by NDEP.
2. For each new NOI, the permittee must develop and implement a SWPPP that meets the requirements of Part III of this permit and covers either the entire site or



all portions of the site for which the permittee is an operator. The SWPPP shall be prepared and maintained on the permittee's project site for these discharges.

**B. NOI Electronic Filing Requirements.** NOI forms must be completed on-line at NDEP's website at the following address:

[http://ndep.nv.gov/bwpc/storm\\_cont03.htm](http://ndep.nv.gov/bwpc/storm_cont03.htm). The applicant will be required to provide the following information to complete the NOI and submit it to NDEP:

1. Owner/operator (applicant) information including the name, address, city, state, zip code and phone number of both the owner and operator;
2. Project/site information including the project name, project address/location, city, state, zip code, latitude, longitude, at least one Assessor's Parcel Number ("APN") associated with the project and the county;
3. Name of the receiving water for any stormwater discharge;
4. The estimated construction start date;
5. The estimated completion date of construction;
6. An estimate of the area to be disturbed to the nearest acre;
7. An estimate of the likelihood of a stormwater discharge;
8. The address of the location where the SWPPP can be viewed including the city, state, zip code and phone number. *Note: It is not necessary to submit a copy of the SWPPP to NDEP.*

**C. Submitting the Completed NOI.** After completing the NOI and filing it electronically with NDEP, the applicant must perform the following steps within thirty (30) days to complete the NOI application:

1. Print out a copy of the NDEP confirmation page and sign below the certification statement. The certification statement and the person responsible for signing the NOI is discussed in Part V of this permit;
2. Write a check to "NDEP" for the required permit fees; and
3. Mail the check and confirmation page with the original signature to:

Stormwater Coordinator  
Bureau of Water Pollution Control  
Nevada Division of Environmental Protection  
901 S. Stewart Street, Suite 4001  
Carson City NV 89701

**D. Continuation of Coverage in the General Permit.** To continue to be included in this general permit, holders of expired general permit NVR100000 must submit a renewal NOI to NDEP within ninety (90) days of the effective date of this permit to remain included under the original NOI. The permittee must verify that the information on the renewal NOI is valid and accurate before submitting the renewal NOI for continued inclusion. No additional filing fee is required to file this renewal NOI. In addition, the previously supplied permit identification number (CSW-xxxx) must be included with the submittal.

**E. Authorization Date of the Permit.** The authorization date of the new permit shall be:

1. The date the NOI is approved by NDEP; or
2. The effective date of this permit for all holders of expired general permit NVR100000 that have submitted a renewal NOI for this permit;
3. An approval letter will be sent to the applicant stating the authorization date. Special conditions may be included in the permit.
4. During the period beginning on the authorization date and lasting until permit coverage is terminated, the permittee is authorized to discharge stormwater or approved non-stormwater to WOUS, as discussed in Part I.D. and in accordance with the SWPPP and the conditions listed in this permit.

### **PART III. STORM WATER POLLUTION PREVENTION PLAN**

**A. Objective.** Prior to submitting the NOI and filing fee, the SWPPP shall be completed and available for inspection at the project site for each construction project and material plant or operation covered by this permit. The purpose of the SWPPP is to identify stormwater pollution sources, reduce their impacts, and comply with the conditions of this permit. The SWPPP shall be prepared in accordance with good engineering practices and shall consist of project information, BMPs, inspection and maintenance, controls for non-stormwater discharges, and a description of permanent stormwater controls that will be built as part of the project. Each of the plan elements must be revised as necessary to maintain accuracy if there are changes in design or construction of the project or if the SWPPP is found to be insufficient. NDEP may require modifications to a SWPPP within a specified time frame. The permittee shall make the SWPPPs available upon request to the State or local agency approving sediment and erosion plans, grading plans, or storm water management plans; local government officials; or the operator of a municipal separate storm sewer receiving discharges from the site. The SWPPP must be kept on-site or locally available and must be available for review by NDEP at the time of an on-site inspection. The SWPPP shall include the following minimum elements:

#### **1. Project Description**

- a. Permittee information including the company or agency, street address, city, state, zip code, and phone number;
- b. Contact information of the permittee including the name, street address, city, state, zip code, and phone number;
- c. The name(s) of the person(s) responsible for implementation of the SWPPP;
- d. The project name;
- e. The project location including the address, city, county and at least one APN associated with the project;

- f. A description of the nature of the construction activity;
  - g. A description of the intended sequence of major activities which disturb soils for major portions of the site (e.g., grubbing, excavation, grading, utilities and infrastructure installation);
  - h. Estimates of the total area of the site and the total area of the site that is expected to be disturbed by excavation, grading, or other construction activities including offsite borrow and fill areas;
  - i. An estimate of the runoff coefficient of the site for both the preconstruction and post-construction conditions and data describing the soil or the quality of any discharge from the site;
  - j. A general location map of the project (e.g., a portion of a city or county map) and a site map of the project indicating the following:
    - i. Drainage patterns and approximate slopes anticipated after major grading;
    - ii. Construction activities and areas of soil disturbance;
    - iii. Areas of the project that will not be disturbed;
    - iv. Locations of major structural and nonstructural controls identified in the SWPPP;
    - v. Locations where stabilization practices are expected to occur;
    - vi. Locations of off-site material and waste;
    - vii. Borrow or equipment storage areas;
    - viii. Location of all surface waters (including wetlands);
    - ix. Areas where final stabilization has been accomplished and no further construction-phase permit requirements apply;
    - x. Locations where storm water discharges to a surface water (including ephemeral waters or dry washes) and to Municipal Separate Storm Sewer Systems ("MS4s");
    - xi. Location and description of any discharge associated with industrial activity other than construction, including storm water discharges from dedicated asphalt plants and dedicated concrete plants, which is covered by this permit;
    - xii. The name of the receiving water(s) and the aerial extent and description of wetland or other special aquatic sites at or near the site which will be disturbed or which will receive discharges from disturbed areas of the project;
    - xiii. Identify and address offsite material storage areas or borrow areas used solely by the permittee's project;
    - xiv. A copy of the permit requirements (attaching a copy of this permit is acceptable).
2. **Stormwater Controls.** Each SWPPP shall include a description of appropriate control measures (i.e., BMPs) that will be implemented as part of the construction activity to control pollutants in storm water discharges. The SWPPP must clearly describe for each major activity identified in Part III.1.g: (a) Appropriate control

measures and the general timing (or sequence) during the construction process that the measures will be implemented; and (b) which permittee is responsible for implementation.

3. **Offsite Material Storage Areas.** Offsite material storage areas (also including overburden and stockpiles of dirt, borrow areas, etc.) used solely by the permitted project are considered a part of the project and must be addressed in the SWPPP.
4. **Erosion and Sediment Controls.** The SWPPP must describe the implementation of control measures, including the following minimum components:
  - a. **Design.** The construction-phase erosion and sediment controls should be designed to retain sediment on site to the degree attainable.
  - b. **Selection, Installation and Maintenance.** All control measures must be properly selected, installed, and maintained in accordance with the manufacturers' specifications and good engineering practices. If periodic inspections or other information indicates a control has been used inappropriately, or incorrectly, the permittee must replace or modify the control for site situations, as soon as practicable and before the next storm event. If implementation prior to the next anticipated storm event is impracticable, maintenance must be scheduled and accomplished as soon as practicable.
  - c. **Offsite Accumulation of Sediment.** When sediment escapes the construction site, off-site accumulations of sediment must be removed at a frequency sufficient to ensure no adverse effects on water quality (e.g., fugitive sediment in street could be washed into storm drains by the next rain and/or pose a safety hazard to users of public streets).
  - d. **Good Housekeeping.** The SWPPP must describe good housekeeping procedures to prevent litter, construction debris, and construction chemicals exposed to stormwater from becoming a pollutant source for storm water discharges (e.g., screening outfalls, picked up daily).
5. **Stabilization Practices.**
  - a. **Description and Schedule.** The SWPPP must include a description of interim and permanent stabilization practices for the site, including a schedule of when the practices will be implemented. Site plans should ensure that existing vegetation is preserved where attainable and that disturbed portions of the site are stabilized. Stabilization practices may include but are not limited to: establishment of temporary vegetation, establishment of permanent vegetation, mulching, geotextiles, sod

stabilization, vegetative buffer strips, protection of trees, preservation of mature vegetation, and other appropriate measures.

- b. **Records of Stabilization.** The following records shall be maintained and attached to the SWPPP: the dates when major grading activities occur; the dates when construction activities temporarily or permanently cease on a portion of the site; and the dates when stabilization measures are initiated.
  - c. **Deadlines for Stabilization.** Except as provided in Part III.A.5.c.(i), (ii), and (iii) below, stabilization measures shall be initiated as soon as practicable in portions of the site where construction activities have temporarily or permanently ceased, but in no case more than fourteen (14) days after the construction activity in that portion of the site has temporarily or permanently ceased.
    - i. Where the initiation of stabilization measures by the fourteenth (14<sup>th</sup>) day after construction activity temporary or permanently cease(s) is precluded by snow cover or frozen ground conditions, stabilization measures shall be initiated as soon as practicable.
    - ii. Where construction activity on a portion of the site is temporarily ceased, and earth-disturbing activities will be resumed within twenty-one (21) days, temporary stabilization measures do not have to be initiated on that portion of site.
    - iii. In arid areas (areas with an average annual precipitation of 0 to 10 inches), semiarid areas (areas with an average annual precipitation of 10 to 20 inches), and areas experiencing droughts where the initiation of stabilization measures by the fourteenth (14<sup>th</sup>) day after construction activity has temporarily or permanently ceased is precluded by seasonal arid conditions, stabilization measures shall be initiated as soon as practicable.
6. **Structural Practices.** The SWPPP must include a description of structural practices to divert flows from exposed soils, store flows or otherwise limit runoff and the discharge of pollutants from exposed areas of the site to the degree attainable. Structural practices may include but are not limited to: silt fences, earth dikes, drainage swales, sediment traps, check dams, subsurface drains, pipe slope drains, level spreaders, storm drain inlet protection, rock outlet protection, reinforced soil retaining systems, gabions, and temporary or permanent sediment basins. Placement of structural practices in floodplains should be avoided to the degree attainable. The installation of these devices may be subject to section 404 of the Clean Water Act (“CWA”). A combination of sediment and erosion control measures is required to achieve maximum pollutant removal.

**a. Sediment Basins.**

- i. For common drainage locations that serve an area with ten (10) or more acres disturbed at one time, a temporary (or permanent) sediment basin that provides storage for a calculated volume of runoff from a 2-year, 24-hour storm event from each disturbed acre drained, or equivalent control measures, shall be provided where attainable until final stabilization of the site. Where no such calculation has been performed, a temporary (or permanent) sediment basin providing 3,600 cubic feet of storage per acre drained, or equivalent control measures, shall be provided where attainable until final stabilization of the site. When computing the number of acres draining into a common location it is not necessary to include flows from offsite areas and flows from onsite areas that are either undisturbed or have undergone final stabilization where such flows are diverted around both the disturbed area and the sediment basin. In determining whether installing a sediment basin is attainable, the permittee may consider factors such as site soils, slope, available area on site, etc. In any event, the permittee must consider public safety, especially as it relates to children, as a design factor for the sediment basin and alternative sediment controls shall be used where site limitations would preclude a safe design.
- ii. For drainage locations that serve ten (10) or more disturbed acres at one time and where a temporary sediment basin or equivalent controls is not attainable, smaller sediment basins and/or sediment traps should be used. Where neither the sediment basin nor equivalent controls are attainable due to site limitations, silt fences, vegetative buffer strips, or equivalent sediment controls are required for all down slope boundaries of the construction area and for those side slope boundaries deemed appropriate as dictated by individual site conditions.
- iii. For drainage locations serving less than ten (10) acres, smaller sediment basins and/or sediment traps should be used. At a minimum, silt fences, vegetative buffer strips, or equivalent sediment controls are required for all down slope boundaries (and for those side slope boundaries deemed appropriate as dictated by individual site conditions) of the construction area unless a sediment basin providing storage for a calculated volume of runoff from a 2-year, 24-hour storm event or 3,600 cubic feet of storage per acre drained is provided.

**b. Velocity Dissipation Devices.**

Velocity dissipation devices must be placed at discharge locations and along the length of any outfall channel to provide a non-erosive flow velocity from the structure to a water course so that the natural physical and biological characteristics and functions are maintained and protected (e.g. no significant changes in the hydrological regime of the receiving water).

7. **Post-Construction Stormwater Management.** The SWPPP must include a description of stormwater management measures that will be installed during the construction process to control pollutants in stormwater discharges that will occur after construction operations have been completed. Structural measures should be placed on upland soils to the degree attainable. Such measures must be designed and installed consistent with applicable local or state stormwater management requirements.

Such practices may include but are not limited to: stormwater detention structures (including wet ponds); stormwater retention structures; flow attenuation by use of open vegetated swales and natural depressions; infiltration of runoff onsite; and sequential systems (which combine several practices). The SWPPP shall include an explanation of the technical basis used to select the practices to control pollution where flows exceed predevelopment levels.

*Note: The installation of these devices may also require a separate permit under section 404 of the CWA. Permittees are only responsible for the installation and maintenance of stormwater management measures prior to final stabilization of the site, and are not responsible for maintenance after stormwater discharges associated with construction activity have been eliminated from the site. However, post construction stormwater BMPs that discharge pollutants from point sources once construction is completed may, in themselves, need authorization under a separate NPDES permit.*

8. **Non-Storm Water Discharge Maintenance.** The SWPPP must identify all allowable sources of non-stormwater discharges listed in Part I.D.2 of this permit, except for flows from fire fighting activities. Non-stormwater discharges are to be eliminated or reduced to extent possible. The operator must implement appropriate pollution prevention measures to minimize pollutants in any non-storm water component(s) of the discharge and must describe those measures in the SWPPP. Except if used in emergency firefighting, superchlorinated wastewaters must be held on-site until the chlorine dissipates, or otherwise dechlorinated prior to discharge.

9. **Other Controls.** The SWPPP must describe:

- a. Measures to prevent the discharge of solid materials, including building

materials, to WOUS, except as authorized by a permit issued under section 404 of the CWA;

- b. Measures to minimize off-site vehicle tracking of sediments, to the extent practicable, and the generation of on-site dust;
- c. Measures to sufficiently stabilize soil at culvert locations to prevent the formation of rills and gullies during construction;
- d. A description of construction and waste materials expected to be stored on-site with updates as appropriate. The SWPPP shall also include a description of controls to reduce pollutants from these materials including storage practices to minimize exposure of the materials to stormwater, and spill prevention and response; and
- e. A description of pollutant sources from areas other than construction (including stormwater discharges from dedicated asphalt plants and dedicated concrete plants), and a description of controls and measures that will be implemented at those sites to minimize pollutant discharges.

**10. Applicable Federal, State, or Local Programs.**

- a. The SWPPP shall be consistent with applicable State, and/or local waste disposal, sanitary sewer or septic system regulations to the extent these are located within the permitted area;
- b. When discharges to water quality-impaired waters that are contained in the current 303(d) Impaired Water Body listing issued by the Nevada Division of Environmental Protection, Bureau of Water Quality Planning, the permittee must investigate whether discharges from the permittee's site will contribute significantly to any 303(d) listing, and when the permittee discharges into a water body with an established Total Maximum Daily Load ("TMDL"), the permittee shall comply with all applicable TMDL requirements. This information can be found on the following NDEP website: <http://ndep.nv.gov/bwqp/standard.htm>.

When a TMDL has not been established as described in paragraph above, the permittee must include a section in the SWPPP describing the condition for which the water has been listed. The SWPPP must also include a demonstration that the BMPs that are selected for implementation will be sufficient to ensure that the discharges will not cause or contribute to an exceedance of an applicable State water quality standard;

- c. Permittees that discharge storm water associated with construction



activities must ensure their SWPPP is consistent with requirements specified in applicable sediment and erosion site plans or site permits, or stormwater management site plans or site permits approved by State or local officials;

- d. SWPPPs must be updated as necessary to remain consistent with any changes applicable to protecting surface water resources in sediment and erosion site plans or site permits, or stormwater management site plans or site permits approved by State or local officials for which the permittee receives written notice; and
- e. The SWPP may incorporate by reference the appropriate elements of plans required by other agencies. A copy of the requirements incorporated by reference shall be included as an attachment to the SWPPP.

#### **11. Maintenance of BMPs**

- a. All erosion and sediment control measures and other protective measures identified in the SWPPP must be maintained in effective operating condition. If site inspections required by Part III.A.12 identify BMPs that are not operating effectively or if the capacity has been reduced by 50%, maintenance shall be performed before the next anticipated storm event, or as soon as possible if maintenance before the next anticipated storm event is not practicable;
- b. If existing BMPs need to be modified or additional BMPs are necessary, implementation must be completed before the next anticipated storm event. If implementation prior to the next anticipated storm event is impracticable, maintenance must be scheduled and accomplished as soon as practicable; and
- c. The permittee must remove sediment from sediment traps or sedimentation ponds when design capacity has been reduced by 50%.

#### **12. Construction Site Inspections**

- a. **Routine Inspection Schedule.** The permittee must ensure routine inspections are performed at the site to ensure the BMPs are functional and that the SWPPP is being properly implemented. The permittee must have the site inspected at least once every seven (7) calendar days and within 24 hours of the end of a storm event of 0.5 inches or greater;
- b. **Inspection Waiver.** Permittees are eligible for a waiver of weekly inspection requirements until one month before thawing conditions are expected to result in a discharge if all of the following requirements are

met:

- i. The project is located in an area where frozen conditions are anticipated to continue for extended periods of time (i.e., more than one month);
  - ii. Land disturbance activities have been suspended; and
  - iii. The beginning and ending dates of the waiver period are documented in the SWPPP.
- c. **Inspectors.** Qualified personnel (provided by the permittee or cooperatively by multiple permittees) shall inspect disturbed areas of the construction site that have not been finally stabilized, areas used for storage of materials that are exposed to precipitation, structural control measures, and locations where vehicles enter or exit the site. “Qualified personnel” means a person knowledgeable in the principles and practice of erosion and sediment controls and who possesses the skills to assess conditions at the site that could impact stormwater quality and the effectiveness of the BMPs selected to control the quality of the stormwater discharges;
- d. **Scope of Inspections.** Inspections must include all areas of the site disturbed by construction activity and areas used for storage of materials that are exposed to precipitation. Inspectors must look for evidence of, or the potential for, pollutants entering the drainage system. Sediment and erosion control measures identified in the SWPPP shall be observed to ensure that they are operating correctly. Where discharge locations or points are accessible, they shall be inspected to ascertain whether sediment and erosion control measures are effective in preventing significant impacts to receiving waters. Where discharge locations are inaccessible, nearby downstream locations shall be inspected to the extent that such inspections are practicable. Locations where vehicles enter or exit the site shall be inspected for evidence of offsite sediment tracking. All BMPs and areas inspected and their condition must be documented in the inspection report;
- e. **Inspection Report.** An inspection report summarizing the scope of the inspection, name(s) and qualifications of personnel making the inspection, the date(s) of the inspection, and major observations relating to the implementation of the SWPPP shall be made. Major observations should include the location(s) of discharges of sediment or other pollutants from the site; location(s) of BMPs that need to be maintained; location(s) of BMPs that failed to operate as designed or proved inadequate for a particular location; and location(s) where additional BMPs are needed that did not exist at the time of inspection;

- f. **Maintaining Inspection Records.** The permittee must ensure that the inspection reports and record of any follow-up actions taken in accordance with Part III.A.12.e of this permit is retained as part of the SWPPP for at least three years from the date that permit coverage expires or the site is finally stabilized. Inspection reports shall identify any incidents of noncompliance with this permit. Where a report does not identify any incidents of noncompliance, the report shall contain a certification that the facility is in compliance with the SWPPP and this permit. The report shall be signed in accordance with Part V.B.1 of this permit;
  - g. **Follow-Up Actions.** Based on the results of the inspection, the SWPPP shall be modified as necessary (e.g., show additional controls on a map required by Part III.A.1.j and/or revise the description of controls required by Part III.A.2) to include additional or modified BMPs designed to correct problems identified. Revisions to the SWPPP shall be completed within seven (7) calendar days following the inspection. If existing BMPs need to be modified or if additional BMPs are necessary, implementation shall be completed within 7 days following receipt of the inspection results or prior to the next anticipated storm event, whenever practicable. If implementation of the BMPs before the next storm event is impracticable, the BMPs shall be implemented as soon as possible if implementation before the next anticipated storm event is not practicable.
- 13. **Maintaining an Updated SWPPP.** The operator must amend the SWPPP within seven (7) business days whenever:
  - a. There is a change in design, construction, operation, or maintenance at the construction site that has a significant effect on the discharge of pollutants to WOUS that has not been previously addressed in the SWPPP; or
  - b. During inspections, monitoring if required, or investigations by the permittee or by local, state, MS4, or federal officials, it is determined the discharges are causing or contributing to water quality exceedances or the SWPPP is ineffective in eliminating or significantly minimizing pollutants in stormwater discharges from the construction site.; or
  - c. If implementation of the BMPs required by the SWPPP revision before the next storm event is impracticable, the BMPs shall be implemented as soon as possible if implementation of the BMP before the next anticipated storm event is not practicable.
- 14. **Deficiencies in the SWPPP.** NDEP may notify the permittee at any time that the SWPPP does not meet one or more requirements of this section. The notification must identify the provisions of this permit that are not being met and parts of the

SWPPP that require modification. Within fifteen (15) days of receipt of the notification by NDEP, the permittee must make the required changes to the SWPPP and submit to NDEP a written certification that the requested changes have been made. NDEP may request a copy of the SWPPP to confirm that all deficiencies have been adequately addressed. NDEP may also take appropriate enforcement action for the period of time the permittee was operating under a plan that did not meet the minimum requirements of this permit.

#### **PART IV. NOTICE OF TERMINATION**

- A. **Notice of Termination.** A Notice of Termination (“NOT”) must be submitted upon completion of the project. To terminate permit coverage, an NOT, as approved by NDEP, shall be submitted when final stabilization has been achieved or when the project has been transferred to another permittee.
- B. **Information Required.** The following minimum information is required on an NOT:
1. The stormwater general permit number;
  2. Facility operator information, including the name, address, city, state, zip code and phone number;
  3. Facility/site location information including the name, address, city, state, zip code, phone number and at least one APN associated with the project; and
  4. A certification statement signed and dated by the permittee. The certification statement is:

“I certify under penalty of law that all storm water discharges associated with construction activity from the identified facility that was authorized by a general permit have been eliminated or that I am no longer the operator of the facility or construction site. I understand that by submitting this notice of termination, I am no longer authorized to discharge stormwater associated with construction activity under this general permit, and that discharging pollutants in stormwater associated with construction activity to waters of the United States is unlawful under the Clean Water Act where the discharge is not authorized by a NPDES permit. I also understand that the submittal of this Notice of Termination does not release an operator from liability for any violations of this permit or the Clean Water Act.”

*Note: For construction projects with more than one permittee and/or operator, the permittee need only make this certification for those portions of the construction site where the permittee was authorized under this permit and not for areas where the permittee was not an operator.*

**C. Final Stabilization.** Final Stabilization means that either:

1. All soil disturbing activities at the site have been completed and a uniform (e.g., evenly distributed, without large bare areas) perennial vegetative cover with a density of 70% of the native background vegetative cover for the area has been established on all unpaved areas and areas not covered by permanent structures, or equivalent permanent stabilization measures have been employed. In such parts of the country, background native vegetation will cover less than 100% of the ground. Establishing at least 70% of the natural cover of the native vegetation meets the vegetative cover criteria for final stabilization (e.g., if the native vegetation covers 50% of the ground, 70% of 50% would require 35% total cover for final stabilization; on a beach with no natural vegetation, no stabilization is required); or

For individual lots in residential construction by either:

- a. The homebuilder completing final stabilization as specified above, or
  - b. The homebuilder establishing temporary stabilization including perimeter controls for an individual lot prior to occupation of the home by the homeowner and informing the homeowner of the need for, and benefits of, final stabilization; or
2. For construction projects on land used for agricultural purposes (e.g., pipelines across crop or range land), final stabilization may be accomplished by returning the disturbed land to its preconstruction agricultural use. Areas disturbed that were not previously used for agricultural activities, such as buffer strips immediately adjacent to WOUS, and areas which are not being returned to their preconstruction agricultural use must meet the final stabilization criteria listed above.

## **PART V. STANDARD PERMIT CONDITIONS**

### **A. Operating Requirements**

1. **Proper Operation and Maintenance.** The permittee shall implement all BMPs used to comply with this permit and maintain them in good working order;
2. **Removed Substances.** Solids and other pollutants removed in the course of treatment or control of stormwater shall be disposed of in accordance with applicable laws, regulations, codes, and ordinances;
3. **Water Quality Standards.** There shall be no discharge of substances that cause or contribute to a violation of the water quality standards of the State of Nevada;

4. **Sampling and Analysis.** If any samples or measurements are taken pursuant to this permit they shall be representative of the volume and nature of the discharge. Laboratory analyses shall be performed by a State of Nevada certified laboratory. Results from this lab must be provided to NDEP.
5. **Test Procedures.** Test procedures for analyses of pollutants shall conform to regulations (40 CFR § 136) published pursuant to Section 304(h) of the Act, under which such procedures may be required, unless other procedures are approved by NDEP;
6. **Recording the Results.** If any measurement or sample is taken pursuant to this permit, the permittee shall record the following information:
  - a. The exact place, date, and time of sampling;
  - b. The dates the analyses were performed;
  - c. The person(s) who performed the analyses;
  - d. The analytical techniques or methods used; and
  - e. The results of all required analyses.
7. **Adverse Impact.** The permittee shall take all reasonable steps to minimize any adverse impacts to receiving waters from any unauthorized discharge including monitoring as necessary to determine the nature and impact of the unauthorized discharge.

## **B. Administrative Requirements**

### **1. Signature Requirements**

#### **a. Notices of Intent**

All NOIs shall be signed as follows:

- i. **For a corporation.** By a responsible corporate officer. For the purpose of this section, a responsible corporate officer means:
  - (1) A president, secretary, treasurer, or vice president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision making functions for the corporation, or
  - (2) The manager of one or more manufacturing, production, or operating facilities, provided the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other

comprehensive measures to assure long-term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

- ii. **For a partnership or sole proprietorship.** By a general partner or the proprietor, respectively; or
  - iii. **For a municipality, state, federal, or other public agency.** By either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a Federal agency includes:
    - (1) The chief executive officer of the agency, or
    - (2) A senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency.
- b. **Duly Authorized Representative.** All SWPPPs and any other information required by this permit or requested by NDEP shall be signed by a person described in Part V.B.1, or by a duly authorized representative of that person. A person is a duly authorized representative only if:
- i. The authorization is made in writing by a person described in Part V.B.1;
  - ii. The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position); and
  - iii. The written authorization is submitted to NDEP.
- c. **Changes to Authorization.** If an authorization in Part V.B.1 is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new written authorization satisfying the requirements of Part V.B.1.b must be submitted to NDEP prior to or together with any information signed by the new representative.

- d. **Certification.** Any person signing a document in Part V.B shall make the following certification.

“I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. I also confirm that a stormwater pollution prevention plan (SWPPP) has been completed, will be maintained at the project site from the start of construction activities, and that the SWPPP will be compliant with any applicable local sediment and erosion control plans. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines for knowing violations.”

2. **Records Retention.** All records and information resulting from activities performed pursuant to this permit shall be retained for a minimum of three years; or longer if required by NDEP.
3. **Availability of Reports.** Except for data determined to be confidential under NRS 445A.665, all reports prepared in accordance with the terms of this permit shall be available for public inspection at NDEP’s office. Knowingly making any false statement on any such report may result in the imposition of criminal penalties as provided for in NRS 445A.710.
4. **Continuation of Coverage.** In accordance with NAC 445A.241, this permit shall remain in effect until reissued, and existing permittees shall be included in the reissued permit if a new NOI is submitted prior to the expiration date of this permit. A filing fee is not required for this new submittal.
5. **Transfer of Ownership or Control.** If control or ownership of the construction project changes, the permittee shall notify the succeeding owner or controller of the existence of this permit by letter, a copy of which shall be forwarded to NDEP. To transfer permit coverage, the new owner or controller must submit a written request to NDEP. All transfer of permits shall be approved by NDEP.
6. **Annual Fee.** The permittee shall remit an annual fee in accordance with NAC 445A.268 on or before July 1 every year. If the original submittal for this permit is done prior to July 1, the permittee shall resubmit a new annual fee on or before July 1 of that same year.



7. **Right of Entry.** The permittee shall allow NDEP's representatives upon the presentation of credentials:
  - a. To enter upon the construction site or the permittee's premises where any records are kept under the terms and conditions of this permit; and
  - b. At reasonable times, to have access to and copy any records kept under the terms and conditions of this permit; to inspect any monitoring equipment or monitoring method used pursuant to this permit; and to perform any necessary sampling to determine compliance with this permit or to sample any discharge.
8. **Penalty for Violation of Permit Conditions.** The permittee shall comply with all conditions of this permit. Any permit non-compliance constitutes a violation of the CWA and is grounds for enforcement action, permit termination, revocation and re-issuance, or modification, or denial of a permit renewal application. NRS 445A.675 provides that any person who violates a permit condition is subject to administrative and judicial sanctions as outlined in NRS 445A.690 through 445A.705.
9. **Furnishing False Information and Tampering with Monitoring Devices.** Any person who knowingly makes any false statement, representation, or certification in any application, record, report, plan or other document filed or required to be maintained by the provisions of NRS 445A.300 to 445A.730, inclusive, or by any permit, rule, regulation or order issued pursuant thereto, or who falsifies, tampers with or knowingly renders inaccurate any monitoring device or method required to be maintained under the provisions of NRS 445A.300 to 445A.730, inclusive, or by any permit, rule, regulation or order issued pursuant thereto, is guilty of a gross misdemeanor and shall be punished by a fine of not more than \$10,000 or by imprisonment. This penalty is in addition to any other penalties, civil or criminal, provided pursuant to NRS 445A.300 to 445A.730, inclusive.
10. **Permit Modification, Suspension or Revocation.** After notice and opportunity for a hearing, this permit may be modified, suspended, or revoked in whole or in part during its term for cause including, but not limited to, the following:
  - a. Violation of any terms or conditions of this permit;
  - b. Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts; or
  - c. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.
11. **Liability.** Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or

penalties established pursuant to any applicable Federal, State or local laws, regulations, or ordinances.

12. **Property Rights.** The issuance of this permit does not convey any property rights, in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations.
13. **Severability.** The provisions of this permit are severable, and if any provision of this permit, or the application of any provisions of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

### **Appendix A – Definitions**

**Best management practices** ("BMPs") means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of "Waters of the United States." BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage.

**Construction Activities** - Construction activities include any clearing, grading and excavation activities that result in the disturbance of one (1) acre or more of total land area, or will disturb less than one (1) acre but are part of a larger common plan for development or sale that will ultimately disturb one (1) or more acres..

**CWA - Clean Water Act** (formerly referred to as the Federal Water Pollution Control Act or Federal Water Pollution Control Act Amendments of 1972) Public Law 92-500, as amended by Public Law 95-217, Public Law 95-576, Public Law 96-483 and Public Law 97-117, 33 U.S.C. 1251 et seq. CWA and regulations means the Clean Water Act (CWA) and applicable regulations promulgated thereunder. In the case of an approved State program, it includes State program requirements.

**Industrial Activities** means temporary concrete, asphalt and material plants which are dedicated to the permitted construction activity.

**Large construction activity** includes clearing, grading and excavation that results in the disturbance of five acres or more of total land area.

**Small construction activity** includes the disturbance of less than one acre of total land area that is part of a larger common plan of development or sale if the larger common plan will ultimately disturb equal to or greater than one and less than five acres. Small construction activity does not include routine maintenance that is performed to maintain the original line and grade, hydraulic capacity, or original purpose of the facility. NDEP may waive the otherwise applicable requirements in a general permit for a storm water discharge from construction activities that disturb less than five acres where the value of the rainfall erosivity factor ("R" in the Revised Universal Soil Loss Equation) is less than five during the period of construction activity. The rainfall erosivity factor is determined in accordance with Chapter 2 of Agriculture Handbook Number 703, Predicting Soil Erosion by Water: A Guide to Conservation Planning with the Revised Universal Soil Loss Equation (RUSLE), pages 21-64, dated January 1997.

**Stormwater** means storm water runoff, snow melt runoff, and surface runoff and drainage.

## **APPENDIX B**

### **BMP Inspection Forms**

# BRC EASTSIDE COMMON AREAS REMEDIATION PROJECT HENDERSON, NEVADA

## BEST MANAGEMENT PRACTICE INSPECTION AND MAINTENANCE REPORT FORM

### CONSTRUCTION ACTIVITIES LOG

Name of Inspector	Date	Major Grading Activities	Temporary Suspension of Construction Activities	Permanent Suspension of Construction Activities	Stabilized Measures Initiated	Comments
<b>Date</b>	<b>Additional Changes</b>					

I certify that this inspection has been conducted in accordance with the Stormwater Pollution Prevention Plan and the Nevada Stormwater General Permit NVR100000.

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

# BRC EASTSIDE COMMON AREAS REMEDIATION PROJECT HENDERSON, NEVADA

## BEST MANAGEMENT PRACTICE INSPECTION AND MAINTENANCE REPORT FORM

### STRAW BALE SEDIMENT BARRIERS

Name of Inspector: \_\_\_\_\_

Inspection Date: \_\_\_\_\_

Title or Qualification: \_\_\_\_\_

Days Since Last Rainfall: \_\_\_\_\_

Amount of Last Rainfall: \_\_\_\_\_ inches

Where are the Straw Bale Sediment Barriers Located?	Are the Straw Bales Embedded in the Ground?	Are the Straw Bales Anchored in Place?	What is the Condition of the Straw Bale Sediment Barriers?	Are Additional Straw Bale Sediment Barriers Needed?

MAINTENANCE REQUIRED FOR STRAW BALE SEDIMENT BARRIERS: \_\_\_\_\_

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TO BE PERFORMED BY: \_\_\_\_\_

ON OR BEFORE: \_\_\_\_\_

SIGNATURE UPON COMPLETION OF CORRECTIVE ACTION: \_\_\_\_\_

I certify that this inspection has been conducted in accordance with the Stormwater Pollution Prevention Plan and the Nevada Stormwater General Permit NVR100000.

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

# BRC EASTSIDE COMMON AREAS REMEDIATION PROJECT HENDERSON, NEVADA

## BEST MANAGEMENT PRACTICE INSPECTION AND MAINTENANCE REPORT FORM

### *EXISTING EARTHEN BERMS*

Name of Inspector: \_\_\_\_\_ Inspection Date: \_\_\_\_\_  
Title or Qualification: \_\_\_\_\_  
Days Since Last Rainfall: \_\_\_\_\_ Amount of Last Rainfall: \_\_\_\_\_ inches

Where is the Earthen Berm Located?	Is the Earthen Berm Still in Place?	What is the Condition of the Earthen Berm?	Are Additional Earthen Berms Needed?

MAINTENANCE REQUIRED FOR EARTHEN BERMS: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

TO BE PERFORMED BY: \_\_\_\_\_ ON OR BEFORE: \_\_\_\_\_

SIGNATURE UPON COMPLETION OF CORRECTIVE ACTION: \_\_\_\_\_

I certify that this inspection has been conducted in accordance with the Stormwater Pollution Prevention Plan and the Nevada Stormwater General Permit NVR100000.

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

# BRC EASTSIDE COMMON AREAS REMEDIATION PROJECT HENDERSON, NEVADA

## BEST MANAGEMENT PRACTICE INSPECTION AND MAINTENANCE REPORT FORM

### *STABILIZED CONSTRUCTION ENTRANCES/EXITS*

Name of Inspector: \_\_\_\_\_ Inspection Date: \_\_\_\_\_  
Title or Qualification: \_\_\_\_\_  
Days Since Last Rainfall: \_\_\_\_\_ Amount of Last Rainfall: \_\_\_\_\_ inches

Where is the Stabilized Construction Entrance/Exit Located?	Is Sediment Being Tracked onto the Road?	Is the Entry Surface Clean or Sediment Filled?	Does All Traffic Use the Entrance?	Is Additional Rock or Turning Needed at the Entrance/Exit?

**MAINTENANCE REQUIRED FOR STABILIZED CONSTRUCTION ENTRANCES/ EXITS:** \_\_\_\_\_

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**TO BE PERFORMED BY:** \_\_\_\_\_ **ON OR BEFORE:** \_\_\_\_\_

I certify that this inspection has been conducted in accordance with the Stormwater Pollution Prevention Plan and the Nevada Stormwater General Permit NVR100000.

Signature: \_\_\_\_\_ Date: \_\_\_\_\_



# **BRC EASTSIDE COMMON AREAS REMEDIATION PROJECT HENDERSON, NEVADA**

## **BEST MANAGEMENT PRACTICE INSPECTION AND MAINTENANCE REPORT FORM**

### *PERMANENT SEDIMENT BASINS*

Name of Inspector: \_\_\_\_\_ Inspection Date: \_\_\_\_\_  
Title or Qualification: \_\_\_\_\_  
Days Since Last Rainfall: \_\_\_\_\_ Amount of Last Rainfall: \_\_\_\_\_ inches

<b>Where is the Sediment Basin Located?</b>	<b>Is there any Erosion of the Sediment Basin?</b>	<b>Has the Design Capacity Been Reduced by 50%?</b>

**MAINTENANCE REQUIRED FOR PERMANENT SEDIMENT BASINS:** \_\_\_\_\_

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**TO BE PERFORMED BY:** \_\_\_\_\_ **ON OR BEFORE:** \_\_\_\_\_

I certify that this inspection has been conducted in accordance with the Stormwater Pollution Prevention Plan and the Nevada Stormwater General Permit NVR100000.

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

**BRC EASTSIDE COMMON AREAS REMEDIATION PROJECT  
HENDERSON, NEVADA**

**BEST MANAGEMENT PRACTICE  
INSPECTION AND MAINTENANCE REPORT FORM**

(Completed weekly or as soon as possible after a significant storm event)

Name of Inspector: \_\_\_\_\_ Inspection Date: \_\_\_\_\_  
Title or Qualification: \_\_\_\_\_  
Days Since Last Rainfall: \_\_\_\_\_ Amount of Last Rainfall: \_\_\_\_\_

STABILIZATION MEASURES					
Area or Drainage Areas*	Date Since Last Disturbance	Date of Next Disturbance	Stabilized (Yes or No)	Control Measures Implemented	Current Conditions of Control Measures

\* See site map for drainage areas. Site may include borrow sources, haul roads, contractor's yard, stockpiles, etc.

\*\* Areas that will be exposed more than 21 days must be stabilized within 14 days

**STABILIZATION REQUIRED:** \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**TO BE PERFORMED BY:** \_\_\_\_\_ **ON OR BEFORE:** \_\_\_\_\_

Control Measure Codes		Condition Codes
1. Temporary Seeding	14. Rock Bed at Construction Exit	U – Upgrade Needed
2. Permanent Plant, Sod, or Seed	15. Timber Mat at Construction Entrance	R – Replacement Needed
3. Mulch	16. Channel Liner	M – Maintenance Needed
4. Soil Retention Blanket	17. Sediment Trap	C – Cleaning Needed
5. Buffer Zone	18. Sediment Basin	I – Increase Measures
6. Preserve Natural Resources	19. Storm Inlet Sediment Trap	S – Stable (no action required)
7. Silt Fence	20. Stone Outlet Structure	
8. Hay Bales	21. Curb and Gutter	
9. Rock Berm	22. Storm Sewers	
10. Diversion Dike	23. Velocity Control Devices	
11. Diversion Swale	24. Excess Dirt Removed From Road	
12. Pipe Slope Drain	25. Haul Roads Dampened for Dust	
13. Paved Flume	26. Cleanup of Possible Contaminants	

I certify that this inspection has been conducted in accordance with the Stormwater Pollution Prevention Plan and the Nevada Stormwater General Permit NVR100000.

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

**BRC EASTSIDE COMMON AREAS REMEDIATION PROJECT  
HENDERSON, NEVADA**

**BEST MANAGEMENT PRACTICE  
INSPECTION AND MAINTENANCE REPORT FORM**

*INCIDENTS OF NON-COMPLIANCE*

Name of Inspector: \_\_\_\_\_

Inspection Date: \_\_\_\_\_

Title or Qualification: \_\_\_\_\_

Days Since Last Rainfall: \_\_\_\_\_

Amount of Last Rainfall: \_\_\_\_\_ inches

**INCIDENTS OF NON-COMPLIANCE:**

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**CAUSE OF THE NON-COMPLIANCE:**

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**ACTIONS TAKEN TO PREVENT FURTHER CAUSES OF THE NON-COMPLIANCE:**

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**IF THERE ARE NO INCIDENTS OF NON-COMPLIANCE, PLEASE SIGN THE  
FOLLOWING CERTIFICATION:**

I certify that the site is in compliance with the Stormwater Pollution Prevention Plan and the Nevada Stormwater General Permit NVR100000.

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

**BRC EASTSIDE COMMON AREAS REMEDIATION PROJECT  
HENDERSON, NEVADA**

**BEST MANAGEMENT PRACTICE  
INSPECTION AND MAINTENANCE REPORT FORM**

*UPDATES TO THE SWPPP*

**CHANGES REQUIRED TO THE SWPPP:**

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**REASONS FOR CHANGE:**

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**TO BE PERFORMED BY:** \_\_\_\_\_ **ON OR BEFORE:** \_\_\_\_\_

I certify that this SWPPP modification is in accordance with the Stormwater Pollution Prevention Plan and the Nevada Stormwater General Permit NVR100000.

Signature: \_\_\_\_\_ Date: \_\_\_\_\_



**Contractor's Stamp**

Contractor Name:	Entact Environmental Services, LLC
Project Name (Number):	BRC Eastside Common Areas Soils Remediation Project (E-7207)
Contract Number:	TBD
Submittal Summary:	Stormwater Pollution Prevention Plan
Submittal Number:	01100-002A
Specification Section:	Section 01100-7, Part 3.08, Subparts A and B
Drawing Number (s):	NA
Page Number:	01100-7
Signed:	 Michael M. Carlson - Field Engineer
Previous Submittal Date (s):	6/6/2008
Date Submitted:	7/21/2008

By this submittal, I hereby represent that I have reviewed this submittal, verified the products, determined and evaluated field measurements and construction criteria possible at the time of this submittal, and coordinated the information within this submittal with respect to the requirements of the Work and the Contract Documents.